

REMARKS/ARGUMENTS

Applicants respectfully request reconsideration and allowance of this application in view of the amendments above and the following comments.

Election/Restrictions

In response to the office action dated 2008-05-28 the applicant has amended the Claims by canceling Claim 1 and introducing new Claims 27 and 28.

The examiner now contends that thereby the Claims drawn to the separation module (Claims 2, 4-11, 13-16 and 26-27) and the Claims drawn to the method of producing said separation module (Claims 18-25 and 28) have become related to distinct inventions.

The examiner thereon argues that the apparatus as claimed in Claims 2, 4-11, 13-16 and 26-27 can be used to practice another materially different process, such as a process that does not require winding as to step (c) as stipulated in Claim 28 and its dependent Claims 18-25. Therefore the examiner withdraws Claims 18-25 and 28 from consideration.

However, Applicants kindly point out that Inventions I and II are related as outlined before by claiming an apparatus (Claims 2, 4-11, 13-16 and 26-27) and a method for producing it (Claims 18-25 and 28). In contrast to the argumentation of the examiner it's neither that "the process as claimed can be practiced by another and materially different apparatus", nor can "the apparatus as claimed be used to practice another and materially different process", as no process executable in the apparatus as claimed is claimed at all.

Furthermore, the apparatus as claimed in Claim 27 is characterized by a “plurality of ceramic capillaries and one or more film strips being wound into said at least one bundle” and the process for producing said apparatus as claimed in Claim 28 is therefore characterized by “winding the plurality of ceramic capillaries and one or film strips into said at least one bundle”.

Hence Applicants traverse the restriction of their claims to Invention I as imposed by the examiner.

Withdrawal of the restriction requirement is respectfully requested.

Claims 4, 5, 8-11 and 26-27 were rejected under 35 USC § 103(a) as being obvious over Kalthod et al. (“Kalthod”), US 5,779,897, in view of McGinnis et al. (“McGinnis”), US 3,690,465, and further in view of Prasad et al. (“Prasad”), US 5,352,361. In response, Applicants respectfully submit that the cited combination of references does not make out a *prima facie* case of obviousness. Therefore, Applicants respectfully request that the Examiner reconsider and withdraw this rejection.

The Examiner contends that Kalthod teaches a fluid separation module comprising a bundle of ceramic capillaries in the range of diameters of Applicant’s capillaries. The Examiner also contends that Kalthod furthermore discloses introducing filaments in a filament winding machine and then into a mandrel as it is rotated (Col. 5, lines 6-8). However the Examiner fails to notice a discrepancy with regard to the material used for the capillaries which also imposes restrictions on the possibly employable manufacturing processes of the separation module. Applicants’ capillaries as defined in Claim 27, are made up from ceramic material, which is intrinsically brittle and therefore can not be bent and deformed freely.

Even though the Kalthod reference discloses a variety of materials usable for producing the hollow fibers (see Col. 8, line 50 to Col. 9 line 40), including ceramic materials (see Col 9, lines 10-11), such disclosure can not be read on the manufacturing process as disclosed in Col. 5, lines 6-8 as the filaments shall be unwound from bobbins, while said bobbins result from extrusion and are washed from solvents, which would be read by those of ordinary skill in the art only as meaning that these particular filaments are made from a polymeric material as disclosed in Col. 9 lines 15-40.

Additionally, the requirement of having the filaments wound on bobbins, as required for the particular process stated in Col. 5, lines 6-8, would certainly result in breakage of ceramic filaments, if such would be used instead.

Therefore, those of ordinary skilled in the art would not consider such manufacturing process with regard to a manufacturing process for producing a separation module comprising ceramic capillaries and hence would not depart from the disclosure of the Kalthod reference to combine it with the disclosure of the McGinnis reference for finding a teaching of how to align the filaments, which is not disclosed in Kalthod reference.

However, the Examiner combines the teaching of Kalthod with that of McGinnis to, in her view, establish that it was known to wind the capillaries into a bundle with proper alignment and to join the end of said bundle of capillaries in an end plate through which the capillaries protrude.

The disclosure of the McGinnis reference relates to "hollow fibers of a polymeric material" (see Col. 3, line 61), which is a necessity in consideration of the foregoing, as the

manufacturing method of the McGinnis reference is related to the cited method of the Kalthod reference (Col. 5, lines 6-8) by requiring intense bending and stretching of the filaments.

Such intense bending and stretching would result in similar breakage of ceramic filaments as in the method of the Kalthod reference.

Hence neither the teaching of methods for fabrication disclosed in the McGinnis reference nor those disclosed in the Kalthod reference can be transferred to the use of ceramic capillaries, as outlined in response to previous office action, to finally arrive at Applicants' claimed invention.

Therefore, even if someone of ordinary skill in the art would desire to overcome the deficiencies of Kalthod, the McGinnis reference would not help to overcome the stated discrepancies between Applicants' claimed invention and the Kalthod reference to the extent the Examiner argues it would.

In short, Applicants respectfully submit that for the foregoing reasons the combination of Kalthod and McGinnis would not have rendered the claimed invention *prima facie* obvious to persons skilled in the art.

The Prasad reference does not bridge the gap between the combination of Kalthod and McGinnis and the instant claims. Therefore, the combination of Kalthod, McGinnis and Prasad also fails to render the claimed invention *prima facie* obvious to persons of ordinary skill in the art.

Neglecting the additional discrepancies outlined above and considering the Examiners'

argumentation up to that point as being valid, purely as an academic exercise, reference is given to responses to previous office actions, pointing out that the baffle plates (3a) of the Prasad reference cannot be formed by film strips as in Applicants' claimed invention, as Prasad's baffle plates are "disc-shaped" (see col. 9, lines 14-15).

Further, as outlined previously, the fact that baffle plates exist does not teach or suggest the use of film strips to join parallel arranged capillaries as claimed, and then to wind the combination of joined capillaries and film strips in such a way that the film strips are transformed into functioning baffle plates. Accordingly, the combination of Kalthod, McGinnis and Prasad still could not possibly lead to the presently claimed invention.

In view of the argumentation above and in further view of the responses to earlier office actions the Prasad reference cannot help to overcome the major discrepancies between Applicants' claimed invention and the combined disclosure of Kalthod in view of McGinnis. In view of the foregoing, Applicants respectfully request that the Examiner reconsider and withdraw this rejection.

Claims 2, 6, 7 and 12 were rejected under 35 USC § 103(a) as being obvious over Kalthod in view of McGinnis and further in view of Prasad as Applied to Claim 5 and further in view of Taketomo, US 4,671,809.

In response, Applicants respectfully point out that this rejection was dependent upon the combination of Kalthod, McGinnis and Prasad making out a *prima facie* case of obviousness of the main claim, which Applicants have shown above is not, in fact, the case.

There is nothing in Taketomo that would overcome the deficiencies of the Kalthod, McGinnis and Prasad combination of references, as discussed above. Accordingly, Applicants respectfully submit that the combination of Kalthod, McGinnis, Prasad and Taketomo likewise fails to make out a *prima facie* case of the obviousness of the rejected claims.

Furthermore, Applicants once again respectfully point to the fact that Fig. 10 and col. 1, lines 50-55, do not relate to the invention of the Taketomo reference, but rather pertain to the prior art discussed by Taketomo. Therefore, such disclosure would never be read by those skilled in the art as providing essential features to improve any idea that could possibly arrive at Applicants' claimed invention. This especially holds true, as the further part of the Taketomo reference cited by the Examiner (col. 2, lines 5-20) explicitly outlines the problems associated with the alleged preferable embodiment of Fig. 10 comprising a "close packing". Therefore, the Taketomo reference does not help to overcome the discrepancies between the combined disclosures of Kalthod, McGinnis and Prasad and Applicants' claimed invention, even if the Examiner's arguments up to that point were taken as true and proven.

In view of the foregoing, Applicants respectfully request that the Examiner reconsider and withdraw this rejection as well.

Claims 13 and 14 were rejected under 35 USC § 103(a) as being obvious over Kalthod in view of McGinnis and further in view of Prasad as applied to Claim 27 and further in view of Shay, US 4,310,607.

In response, Applicants respectfully point out that this rejection was dependent upon the combination of Kalthod, McGinnis and Prasad making out a *prima facie* case of obviousness of

the main claim, which Applicants have shown above is not, in fact, the case.

There is nothing in Shay that overcomes the deficiencies in the combination of Kalthod, McGinnis and Prasad. Accordingly, Applicants respectfully submit that the combination of Kalthod, McGinnis, Prasad and Shay likewise fails to make out a *prima facie* case of the obviousness of the rejected claims.

Shay pertains to "battery cell construction" (see title of the application). Applicants doubt that the artisan in the field of separation technology would rely on any teaching in that field of science.

Even if said artisan would refer to the Shay reference in spite of it being in a different field of endeavor, the Shay reference does still not help to overcome the deficiencies of the combined teachings of Kalthod, McGinnis and Prasad as developed above, as no disclosure of film-strips or their wound arrangement can be found in the teaching of the Shay reference.

In view of the foregoing, Applicants respectfully request that the Examiner reconsider and withdraw this rejection as well.

Claim 15 was rejected under 35 USC § 103(a) as being obvious over Kalthod in view of McGinnis and further in view of Prasad as applied to Claim 27 and further in view of Bellhouse, US 6,217,764.

In response, Applicants respectfully point out that this rejection was dependent upon the combination of Kalthod, McGinnis and Prasad making out a *prima facie* case of obviousness of the main claim, which Applicants have shown above is not, in fact, the case.

There is nothing in Bellhouse that overcomes the deficiencies in the combination of Kalthod, McGinnis and Prasad. Accordingly, Applicants respectfully submit that the combination of Kalthod, McGinnis, Prasad and Bellhouse likewise fails to make out a *prima facie* case of the obviousness of the rejected claim.

Furthermore the Applicants once more respectfully point out that the teaching in Bellhouse at col. 1, lines 27-29, does not relate to the invention of the Bellhouse reference, but rather pertains to the prior art discussed by Bellhouse.

Therefore, such disclosure would not be read by those skilled in the art as providing essential features to improve any idea that might arrive at Applicants' claimed invention.

This especially holds true, as the a further reading of the Bellhouse reference after the cited part explicitly outlines the problems associated with the alleged preferable embodiment of col. 1, lines 27-29. Therefore, the Bellhouse reference does not help to overcome the differences between the combined teachings of Kalthod, McGinnis and Prasad and Applicants' claimed invention, even if the Examiner's argument up to that point were true and proven.

Furthermore a ceramic housing as disclosed by the Bellhouse reference could not possibly overcome the distinctions between the disclosures of the Kalthod et al., of McGinnis et al. and Prasad et al. references as pointed out above.

In view of the foregoing, Applicants respectfully request that the Examiner reconsider and withdraw this rejection as well.

Claim 16 was rejected under 35 USC § 103(a) as being obvious over Kalthod in view of McGinnis and further in view of Prasad as applied to Claim 27 and further in view of Dobo, US 4,268,278.

In response, Applicants respectfully point out that this rejection was dependent upon the combination of Kalthod, McGinnis and Prasad making out a *prima facie* case of obviousness of the main claim, which Applicants have shown above is not, in fact, the case.

There is nothing in Dobo that overcomes the deficiencies in the combination of Kalthod, McGinnis and Prasad. Accordingly, Applicants respectfully submit that the combination of Kalthod, McGinnis, Prasad and Dobo likewise fails to make out a *prima facie* case of the obviousness of the rejected claim.

Again, Applicants respectfully point out that Dobo's teaching at col. 1, lines 1-65, does not in general relate to the invention of the Dobo reference, but rather pertains to the prior art and physical effects prevailing with regard to membrane diffusion. Furthermore, no disclosure of a separation module comprising a catalyst can be found within col. 1, lines 1-65, but only the fact that "fibers are usefull (...) in catalysis" (Col. 1, lines 10-12), which obviously has been misinterpreted .

Therefore, the Dobo reference does not help to overcome the discrepancies between the combined teachings of Kalthod, McGinnis and Prasad and Applicants' claimed invention, even if the Examiner's argument to that point were true and proven.

In view of the foregoing, Applicants respectfully request that the Examiner reconsider and withdraw this rejection as well.

Applicants believe that the foregoing constitutes a bona fide response to all outstanding objections and rejections.

Applicants also believe that this application is in condition for immediate allowance.

However, should any issue(s) of a minor nature remain, the Examiner is respectfully requested to telephone the undersigned at telephone number (212) 808-0700 so that the issue(s) might be promptly resolved.

Early and favorable action is earnestly solicited.

Respectfully submitted,

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